

Applicants : Sydir et al.
Serial No. : 10/749,035
Filed : December 30, 2003
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Attorney's Docket No: Intel-014PUS
Intel Docket Number: P17941

AMENDMENTS TO THE DRAWINGS:

The attached replacement sheets of drawings includes changes to FIGS. 1, 5 and 6 and replaces the original sheets including FIGS. 1, 5 and 6.

In Figure 1, the words "Prior Art" was added.

In Figure 5, the block labeled "end" was removed.

In Figure 6, the terms blocks labeled "BL158B," "BL258B," "BL358B" and "BL458B," were relabeled "BL1S8B," "BL2S8B," "BL3S8B" and "BL4S8B."

Attachments following last page of this Amendment:

Replacement Sheet (3 pages)

REMARKS

Claims 1 to 21 and 23 to 28, are pending in this application; of which, claims 1, 9, 18, 21 and 25 are the independent claims. Favorable reconsideration and further examination are respectfully requested.

The Examiner objected to the drawings because the Examiner alleged that the drawings did not show that the alignment buffer was in communication with the media switch fabric. Applicants respectfully point out that Figure 1A shows the alignment buffer 106 in communication with the media switch fabric 104.

The Examiner also objected to the drawings because the Examiner alleges that Figure 1 is Prior Art and should be labeled as Prior Art. Applicants have amended claim 1 to indicate Prior Art.

The Examiner further objected to the drawings the terms blocks labeled "BL158B," "BL258B," "BL358B" and "BL458B," should be "BL1S8B," "BL2S8B," "BL3S8B" and "BL4S8B" respectively. Applicants have made the recommended changes.

The Examiner objected to the drawings because in FIG. 5 an arrow should be pointing to the "End" block instead of the "Begin" block. Applicants respectfully disagree. The "End" block has been removed instead to be consistent with the specification (see page 8, lines 21 to 23 of Applicants' specification).

Applicants respectfully request withdrawal of the previous drawing objections.

The Examiner objected to the specification because of an extraneous parenthesis found on page 2, line 14 of the Applicants' specification. Applicants have amended the specification to remove the extraneous parenthesis. Applicants respectfully request withdrawal of the specification objection.

The Examiner objected to claims 21 and 25 because a period appeared where a colon should have appeared instead. Applicants have amended claims 21 and 25 to replace the period after the word "comprising" with a colon. Applicants respectfully request withdrawal of the claim objections.

Claims 1 to 28 were rejected under 35 U.S.C. § 103(a) as being obvious over Cruikshank (U.S. Patent Number 6,829,315 hereinafter "Cruikshank"). Claims 1 to 28 were also rejected under 35 U.S.C. § 103(a) as being obvious over Cruikshank in view of Constant et al (U.S. Patent Number 4,107, 458 hereinafter "Constant").

Amended claim 1 is directed to a network processor that includes a crypto system. The crypto system encrypts data to form ciphered data so that an intended receiver with a correct cryptographic key may decrypt the ciphered data. The network processor also includes an alignment buffer to receive header data and the ciphered data from the crypto system and a switch fabric having a plurality of transmit buffer elements to receive data from the alignment buffer. The alignment buffer provides data to the switch fabric in blocks having a predetermined size.

The applied art is not understood to disclose or to suggest the foregoing features of claim 1. In particular, neither Cruikshank nor Constant disclose or suggest an alignment buffer to receive header data and the ciphered data from the crypto system.

Cruikshank describes a communication circuit having a decoder connected to an alignment buffer (see Abstract of Cruikshank). The Examiner in his own words says that Cruikshank does not teach explicitly a cryptographic system (see Page 8 of the Office Action). Applicants further submit that Cruikshank does not suggest a crypto system much less an alignment buffer to receive header data and ciphered data from the crypto system. The Examiner has indicated that encoder 307 and decoder 324 represent a crypto system. This is clearly an assumption by the Examiner that has no basis in Cruikshank. First, Cruikshank never mentions a crypto system much less that the encoder 307 and the decoder 324 form a crypto system. Second, the encoder 307 is not connected to the decoder 324 nor is it connected to the alignment buffer 125. Moreover, Applicants submit that a decoder even in the broadest possible sense only decodes and does not encrypt.

Furthermore, even if Cruikshank's system suggests a crypto system, the data transferred to the alignment buffer is not ciphered data. It is not even encoded data. Therefore, based on the foregoing arguments, Cruikshank does not disclose or suggest an alignment buffer to receive header data and ciphered data from the crypto system.

Constant describes a cipher computer and cryptographic system (see Abstract of Constant). Constant does not disclose or suggest an alignment buffer much less an alignment buffer to receive header data and ciphered data from the crypto system.

Accordingly, for at least the reasons indicated above, even if Cruikshank were combined with Constant, the resulting hypothetical combination would not disclose or suggest an alignment buffer to receive header data and ciphered data from the crypto system.

Applicants further argue that there is no motivation, suggestion or teaching to combine Cruikshank with Constant. Cruikshank is specific that his invention is directed to an alignment buffer connected to a decoder (see Abstract of Cruikshank). On the other hand, Constant never mentions alignment buffers. Therefore, there is not a motivation to combine these two pieces of prior art.

Applicants further argue that the Examiner has used impermissible hindsight to combine these references and to further argue that Cruikshank shows that Applicants' invention is obvious. Cruikshank only shows a decoder connected to an alignment buffer. The Cruikshank reference does not disclose an alignment buffer connected to a crypto

For at least the foregoing reasons, Applicants respectfully request that the Cruikshank and the Constant references be withdrawn with respect to claim 1.

Claims 9, 18, 21 and 25 have the limitation of an alignment buffer connected to a crypto system. Applicants submit the Cruikshank and the Constant references should also be withdrawn with respect to claims 9, 18, 21 and 25 for at least the same reasons as claim 1.

Applicants further submit that amended claim 21 further distinguished over the prior art cited. In particular, neither Cruikshank nor Constant disclose or suggest that the crypto system includes a predetermined number of crypto unit processing contexts and the alignment buffer includes a buffer element for each of the predetermined number of processing contexts.

The Examiner has taken Official Notice that a processor will have processing contexts associated therewith (for any given node) and the context will remain associated with the packets for any processing schedule even when stored in a buffering device (see pages 5 and 6 of the Office Action). Applicants traverse the Examiner's Official Notice. Applicants respectfully request that the Examiner cite appropriate art to support his assumption.

Also, the Examiner has not shown in the cited art that the alignment buffer includes a buffer element for each of the predetermined number of processing contexts. Applicants respectfully request that the cited art be withdrawn for at least the foregoing reasons.

Applicants submit that all dependent claims now depend on allowable independent claims.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for withdrawing the prior art cited with regards to any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicants submit that the entire application is now in condition for allowance. Such action is respectfully requested at the Examiner's earliest convenience.

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All correspondence should be directed to the address below. Applicants' attorney can be reached by telephone at (781) 401-9988 ext. 23.

No fee is believed to be due for this Response; however, if any fees are due, please apply such fees to Deposit Account No. 50-0845 referencing Attorney Docket: Intel-014PUS.

Respectfully submitted,

Date:

20 February 2007


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